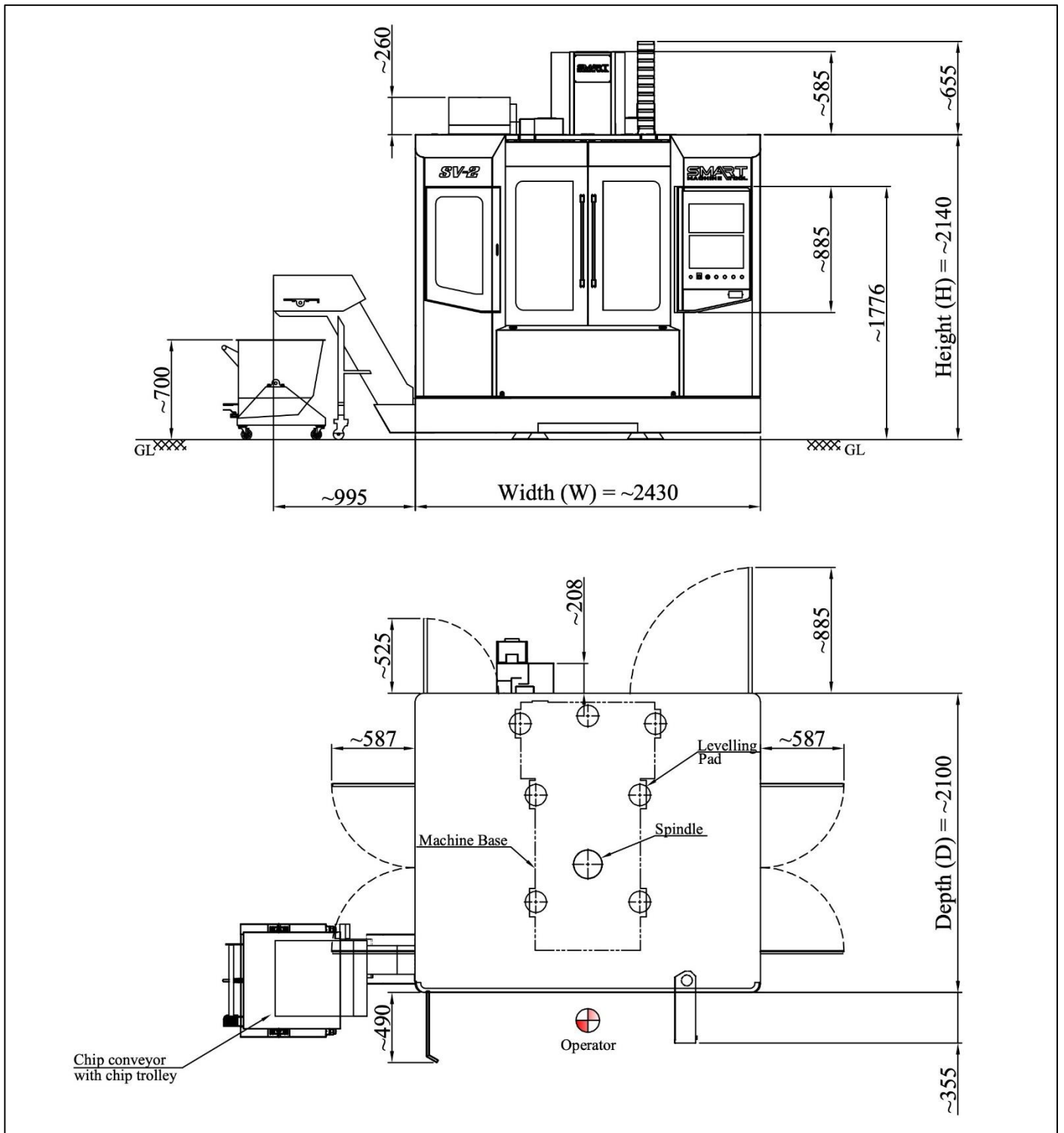


SMART
MACHINE TOOL

SV2

**Installation
Packet**

SV-2 Floor Space Diagram with chip conveyor For reference only



2.10 Installation instructions for the machine




WARNING

- Only qualified personnel are authorised to carry out power connections.
- In order to prevent anyone from turning Power on by mistake during power connection, place a tag or placard reading “Never turn Power On” at a prominent place.

1. Connect the mains cable to R, Y, B and PE.

Input Voltage	220V, 3 Phase AC
Maximum voltage fluctuation	± 5%
Maximum line to line fluctuation	5%
Frequency	60Hz
Type of Earthing	Type C / D Chemical Earthing
Voltage Stabilizer	Required. Refer the below table for capacity
Isolation Switch for Stabilizer	100 A as per capacity

Machine Model	Power Capacity	Cable Size	Rating of Isolation Switch	AMPS AT 220V
SV-2	25 KVA	16 mm ²	100 A	65.5
SV-3	25 KVA	16 mm ²	100 A	65.5
SV-5	35 KVA	16 mm ²	100 A	92

2. Connect ground terminal to PE.
3. Coolant Motor, Flush Coolant Motor, Coolant through tool motor arrange as per drawing of coolant tank & make electrical connection for the same.
4. Perform checking as follows:
 - Check for proper earth connections and 3-phase input supply connection.
 - Check for the 3-phase input supply.
 - Put on the Main Switch.
 - Press NC ON push button.  The display appears.
 - Release all Emergency Stops (on the machine operator panel and chip conveyor panel if available).
 - Now the machine is ready for operation.

2.7 Removal of axis lock plates



CAUTION

- Remove the axis lock plates from the slides before turning the power On.
- Upon delivery, the axis lock plates are used for transportation. Ensure that they are removed before operating the machine. These lock plates can be retained and reused whenever the machine is moved again.

2.8 Lifting diagram

While lifting the machine, refer details as given below:-

Model	Unit	SV-2	SV-3	SV-5
Net Weight	Kg	4800	6100	8500

Shipping Dimensions/Weights				
Model	Crate	Net weight (kgs)	Gross Weight (kgs)	Measurements (CM)
SV2	Machine	4000kgs	4200kgs	220cmx220cmx250cm
	Accessories 1	600kgs	700kgs	368cmx74cmx168cm
SV3	Machine	4800kgs	4900kgs	300cmx230cmx255cm
	Accessories 1	650kgs	800kgs	412cmx102cmx142cm
	Accessories 2	600kgs	700kgs	115cmx70cmx110cm

SV3 - Tool changer not mounted

SV5 - Tool changer no mounted

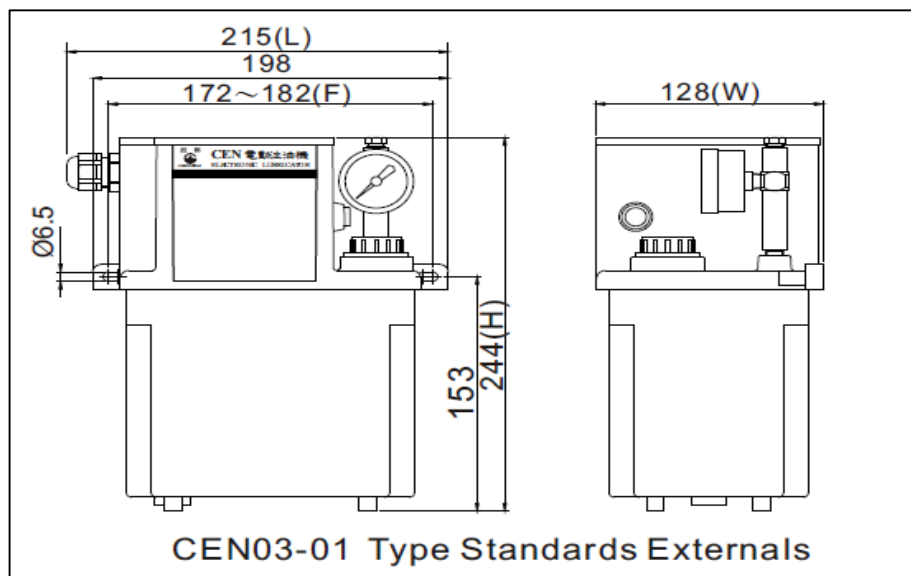
Points to be lubricated and brands of oil

Sl. No.	Parts to be lubricated	ISO Grade	IOC	HP	CASTROL	IOC
01	X/Y/ Z - axis Guideways & Ball screws	VG68	SERVO WAY 68	WAY LUB 68	Meghna BD 68	Motomol 68
02	Spindle Oil chiller	VG32	SERVO SYSTEM 32 SER (oil needed if option is ordered)	ENKLO 32	Hyspin AWS 32	Hydrol S 32
03	ATC gearbox	VG150	SERVO MESH SP150	Parthen EP 150	Alpha SP 150	Amocam oil 150
04	4th Axis	VG150	SERVO MESH SP151	Parthen EP 151	Alpha SP 151	Amocam oil 151
05	FRL	VG32	SERVO SYSTEM 32 SER	ENKLO 32	Hyspin AWS 32	Hydrol S 32

Lubrication System

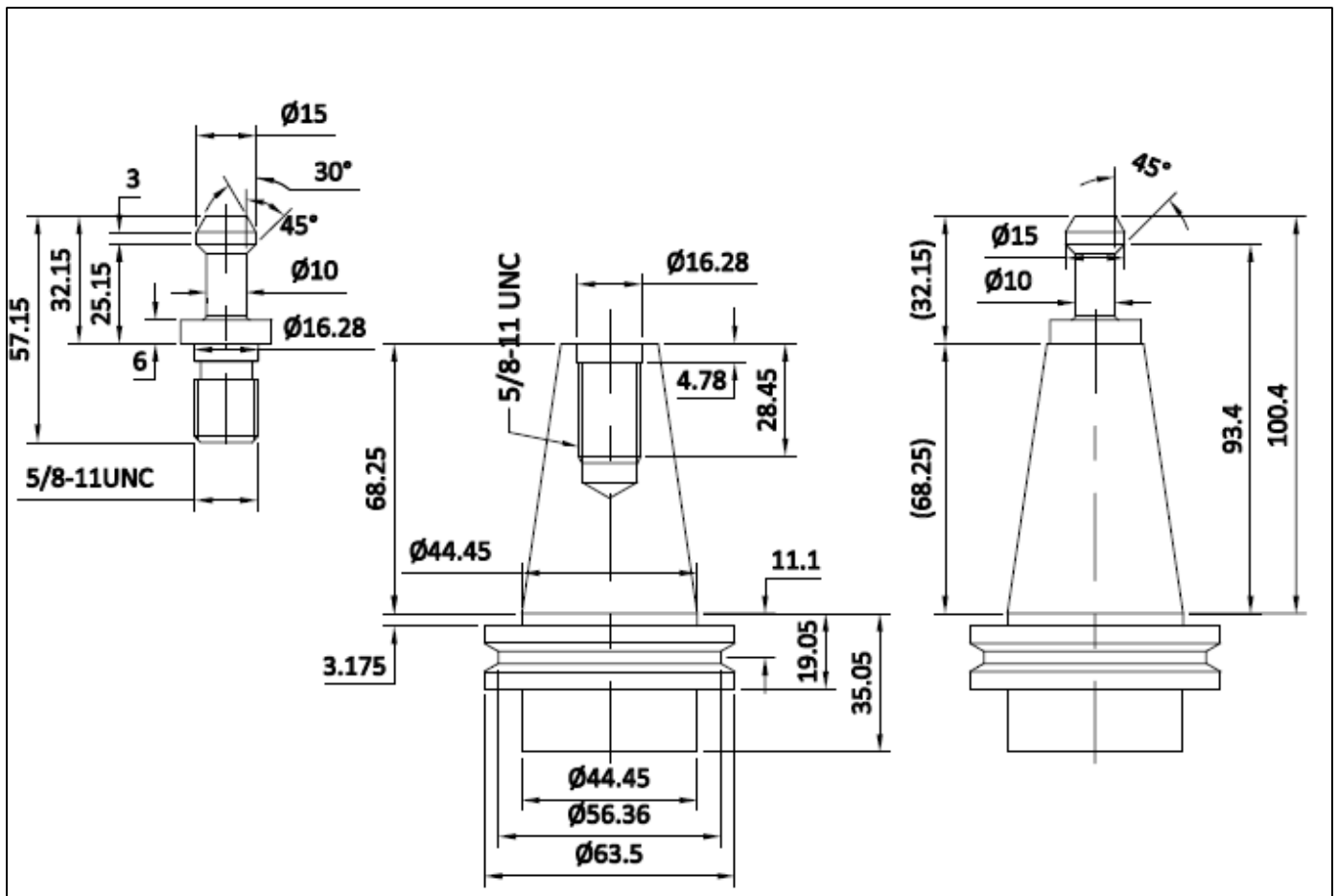
- Centralized is used for lubrication on for LM guide and ball screw of all 3 axes.
- Interval for lubrication: Controlled by PLC (Settable by user).

Max coolant capacity: 80 gallons



Incoming air:
80-100 psi
5-10 CFM

CAT 40 Pull Stud and Tool holder



Power-Torque Diagram

Installation, Operation & Maintenance Manual

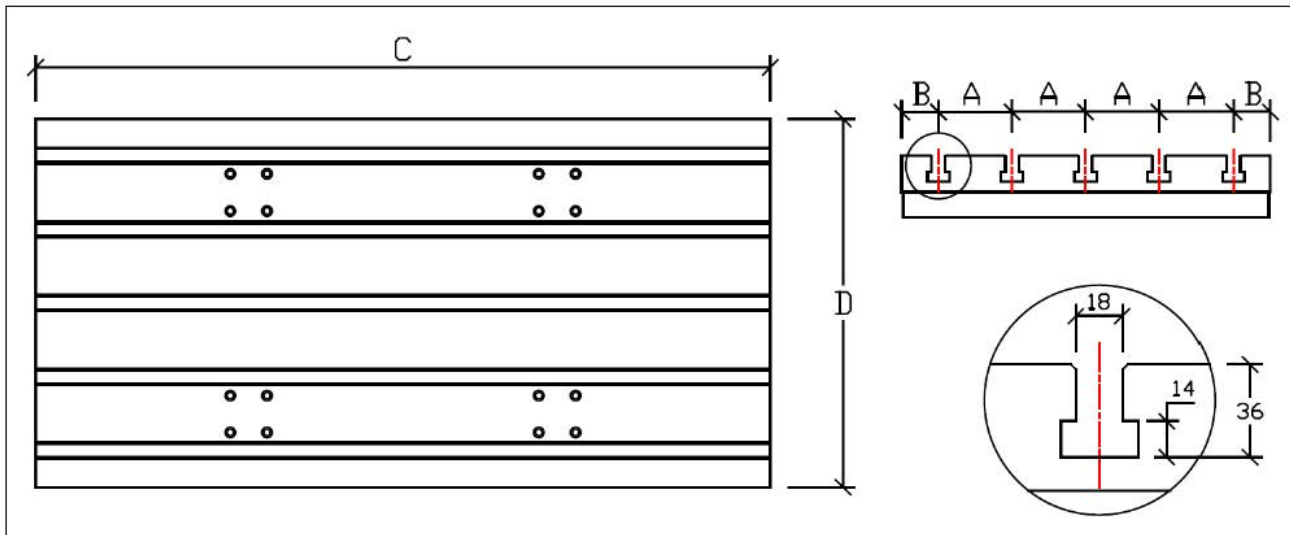


Table Dimension - SV Series			
	SV-2	SV-3	SV-5
A	100	100	125
B	50	100	75
C	1000	1250	1450
D	500	600	650